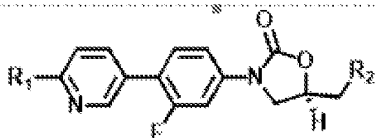


CLAIMS

What is claimed is:

1. A compound of Formula I or a pharmaceutically acceptable salt thereof:

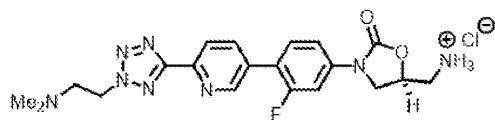


Formula I

wherein R₂ is an amine (NH₂) or an acetamide (NHCOCH₃), and

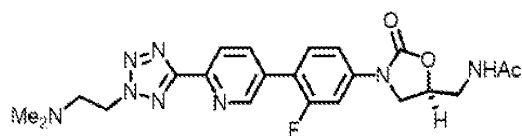
wherein R₁ is a tetrazole ring substituted at position 2' with an aminoalkyl.

2. The compound of claim, wherein the aminoalkyl is dimethylaminoethyl.
 3. The compound of claim 1 having Formula 1b:



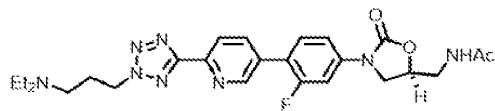
Formula 1b

4. The compound of claim 1 having Formula 1c or a pharmaceutically acceptable salt thereof:

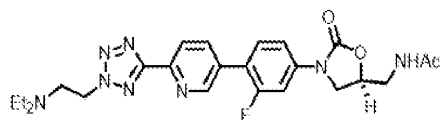


Formula 1c

5. The compound of claim 1 having Formula 1d or Formula 1e

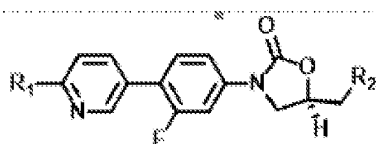


Formula 1d,



Formula 1e

6. The compound of any one of claims 1 to 5, wherein the compound has a Selectivity Index (SI) index for Erd/HepG2 and H37Rv/HepG2 ranges from 100 to 1700.
7. The compound of any one of claims 1 to 5, wherein the compound has a SI index for Erd/HepG2 and H37Rv/HepG2 ranges from 200 to 1700.
8. The compound of any one of claims 1 to 5, wherein the compound has a SI index for Erd/HepG2 and H37Rv/HepG2 ranges from 300 to 1700.
9. A liposomal composition comprising liposomes vesicles, the liposome vesicles comprising a compound of Formula I or a pharmaceutically acceptable salt thereof therein

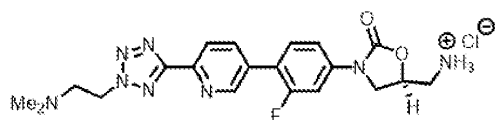


Formula I

wherein R₂ is an amine (NH₂) or an acetamide (NHCOCH₃), and

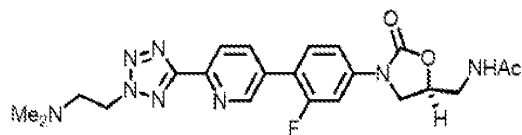
wherein R₁ is a tetrazole ring substituted at position 2' with an aminoalkyl.

10. The liposomal composition of claim 9, wherein the aminoalkyl is dimethylaminoethyl.
11. The liposomal composition of claim 9, the liposome vesicles comprising a compound of Formula 1b:



Formula 1b

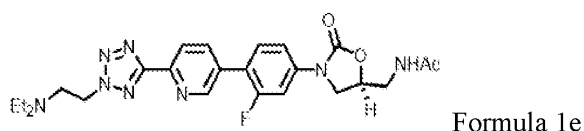
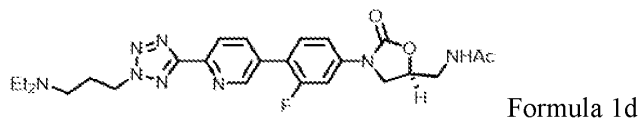
12. The liposomal composition of claim 9, the liposome vesicles comprising a compound of Formula 1c



Formula 1c

13. The liposomal composition of claim 9, the liposome vesicles comprising a compound of

Formula 1d or Formula 1e



14. The liposomal composition of any one of claims 9 to 13, wherein the liposome vesicles are in an aqueous medium.
15. The liposomal composition of any one of claims 9 to 13, wherein the compound is entrapped in the liposome vesicles with a trapping agent, and wherein the trapping agent comprises a polyanion.
16. The liposomal composition of claim 15, wherein the trapping agent is triethylammonium sucrose octasulfate or ammonium sulfate.
17. The liposomal composition of claim 15, wherein the trapping agent is triethylammonium sucrose octasulfate.
18. The liposomal composition of claim 15, wherein the trapping agent is ammonium sulfate.
19. The liposomal composition of any one of claims 9 to 13, comprising a salt of the compound, wherein the salt is sulfate, citrate, sucrosate, a salt with a phosphorylated or sulfated polyol, or a salt with a phosphorylated or sulfated polyanionic polymer.
20. The liposomal composition of any one of claims 9 to 13, comprising a salt of the compound, wherein the salt is sulfate.
21. The liposomal composition of any one of claims 9 to 13, wherein the compound in the liposome vesicles has an aqueous solubility less than 1 mg/mL.
22. The composition of any one of claims 9 to 13, wherein the compound in the liposome vesicles has an aqueous solubility less than 0.1 mg/mL.
23. The liposomal composition of any one of claims 9 to 13, wherein the liposome vesicles comprise a membrane comprising phosphatidylcholine and cholesterol.
24. The liposomal composition of claim 23, wherein the membrane separates the inside of

the liposome vesicles from the aqueous medium.

25. The liposomal composition of claim 23, wherein the phosphatidylcholine is distearoylphosphatidylcholine (DSPC) or hydrogenated soy phosphatidylcholine (HSPC).

26. The liposomal composition of claim 23, wherein the phosphatidylcholine to cholesterol molar ratios is from about 60:40 to about 35:65.

27. The liposomal composition of claim 23, wherein the phosphatidylcholine to cholesterol molar ratio is from about 55:45 to about 35:65.

28. The liposomal composition of claim 23, wherein the phosphatidylcholine to cholesterol molar ratio is from about 50:50 to about 45:55.

29. The liposomal composition of claim 23, wherein the phosphatidylcholine to cholesterol molar ratio is from about 50:50 to about 40:60.

30. The liposomal composition of any one of claims 23 to 29, wherein the membrane further comprises a polymer-conjugated lipid.

31. The liposomal composition of any one of claims 9 to 13, wherein the liposome vesicles comprise HSPC, cholesterol and polymer-conjugated lipid in a about 55:45:2.75 molar ratio.

32. The liposomal composition of claim 30 or claim 31, wherein the polymer-conjugated lipid is PEG(Mol. weight 2,000)-distearoylglycerol (PEG-DSG) or PEG(Mol. weight 2,000)-distearoylphosphatidylethanolamine (PEG-DSPE).

33. The liposomal composition of any one of claims 9 to 13, wherein the composition is a liquid pharmaceutical formulation for parenteral administration.

34. The liposome composition of any of the claims 9 to 13 wherein the liposomes have a Z-average particle size ranging from about 80 to about 130 nm.

35. A method of treating bacterial infection, the method comprising administering to a subject in need thereof a therapeutically effective amount of the liposomal composition of any one of claims 9 to 13.

36. The method of claim 35, wherein the bacterial infection is mycobacterium tuberculosis infection.

37. The method of claim 35 or claim 36, wherein the compound in the liposome vesicles has a minimum inhibitory concentration (MIC) ranging from about 0.01 µg/ml to about 0.25 µg/ml.

38. The method of claim 35 or claim 36, wherein the compound in the liposome vesicles has a MIC ranging from about 0.01 µg/ml to about 0.1 µg/ml.

39. The method of any one of claims 35 to 38, comprising administering the liposomal composition parenterally.
40. The method of claim 39, wherein the method comprises administering simultaneously or sequentially one or more active agents.
41. The method of claim 40, wherein the one or more active agents comprise bedaquiline, pretomanid, pyrazinamide, moxifloxacin, a pharmaceutically acceptable salt thereof or a combination thereof.
42. The method of claim 39, wherein the liposomal composition is administered once a week to once every six weeks.
43. The method of claim 39, wherein the percentage of compound remaining in blood following administration to the subject in need thereof is greater than 20% of the administered amount at 6 hours.
44. The method of claim 39, wherein the percentage of compound remaining in blood following administration to the subject in need thereof is greater than 10% of the administered amount.
45. A method of making liposome composition comprising the steps of:
- (i) preparing the liposomes comprising phospholipid, cholesterol, and PEG-lipid, and having an interior space containing a trapping agent, in a medium substantially free from the trapping agent;
 - (ii) contacting the liposomes with a compound of any one of claims 1 to 8 in an aqueous medium to effect encapsulation of the compound in the liposomes;
 - (iii) removing unencapsulated compound; and
 - (iv) providing the liposomes in a physiologically acceptable medium suitable for parenteral use.